

EDWARD J. MARKEY

7TH DISTRICT, MASSACHUSETTS

www.house.gov/markey

ENERGY AND COMMERCE COMMITTEE

RANKING MEMBER

SUBCOMMITTEE ON

TELECOMMUNICATIONS AND  
THE INTERNET

RESOURCES COMMITTEE

# Congress of the United States

House of Representatives

Washington, DC 20515-2107

2108 RAYBURN BUILDING  
WASHINGTON, DC 20515-2107  
(202) 225-2836

DISTRICT OFFICES:

5 HIGH STREET, SUITE 101  
MEDFORD, MA 02155  
(781) 396-2900

188 CONCORD STREET, SUITE 102  
FRAMINGHAM, MA 01702  
(508) 875-2900

November 27, 2001

Honorable Spencer Abraham, Secretary  
U.S. Department of Energy  
1000 Independence Avenue, S.W.  
Washington, DC 20585

Dear Secretary Abraham:

I write to express my concern about the pending application from the Tennessee Valley Authority (TVA) to produce tritium at its Watts Bar nuclear power plant for use by the Department of Energy (DOE) in nuclear warheads. The license would allow, for the first time, a commercial nuclear reactor to be used to produce weapons-grade material for nuclear warheads. This unprecedented action would send the wrong message to the world about our commitment to nonproliferation. In the aftermath of September 11, which has heightened concern over the proliferation of weapons of mass destruction, as well as the Bush-Putin summit, which will result in the dismantling of thousands of nuclear warheads, I question both the wisdom and need for this license.

I would appreciate your assistance in understanding whether there remains any need to proceed with tritium production in commercial reactors in the near-term, given the President's recent announcement of substantial reductions in numbers of strategic weapons. Such reductions would appear to undercut the basis for the petition by allowing the U.S. to meet future tritium needs through recycling – just as it has done since 1988. In order to assist me with my ongoing oversight and legislative responsibilities in this area, I request your assistance and cooperation in providing answers to the following questions:

The proposed license amendment would permit TVA to install 2304 tritium-producing absorber rods into the Watts Bar reactor and irradiate them for 18 months.

1. How much tritium will this produce in a single fuel cycle?
2. How many nuclear warheads will this amount of tritium sustain and for how long?
3. Was the petition to install this number of tritium-producing rods formulated to sustain the nuclear arsenal projected prior to the President's announcement that the U.S. would make substantial cuts in the arsenal's size? If so, what impact do these reductions have on the need to proceed with TVA's current tritium production plans?

4. Will you be reviewing TVA's proposed license amendment in the context of the recent announcement that the size of the U.S. nuclear arsenal will be substantially reduced? If not, why not?

Current tritium needs are being met by recycling tritium from dismantled warheads. In his recent summit with Russian President Vladimir Putin, President Bush pledged to reduce the United States' arsenal of nuclear warheads by more than two-thirds over the next decade. This amounts to several thousand strategic warheads.

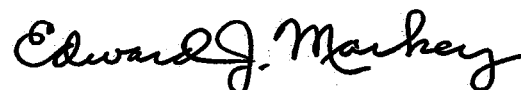
5. Is the Watts Bar license still necessary, given that the tritium from many of these dismantled weapons could be recovered?
6. How long will the tritium from these dismantled warheads sustain the remaining warheads?
7. Is it necessary to produce new tritium while this source of recycled tritium still exists? Why or why not?
8. What are the costs of meeting tritium requirements through recycling compared to the costs of producing such tritium at Watts Bar? If recycling is cheaper for the taxpayers, shouldn't we pursue that option, especially since producing it in a civilian nuclear reactor sends the wrong nonproliferation signal to our partners in the war against terrorism?

While the United States is a nuclear weapons state under the Nuclear Nonproliferation Treaty, in the past, the United States has refrained from mixing its military and civilian nuclear programs. The TVA initiative to produce tritium at Watts Bar would be the first time that the U.S. has breached the historic separation between "Atoms for Peace" and "Atoms for War."

9. Are you at all concerned that if the U.S. starts producing tritium for nuclear weapons in its civilian nuclear power reactors, that this will undermine U.S. efforts to convince other nations that they should refrain from using their civilian nuclear infrastructure for military purposes? If not, why not?
10. In light of the potentially adverse nonproliferation consequences, and the potential to obtain needed tritium through recycling, has the Department considered canceling or postponing plans to proceed with such production? If not, why not?

Thank you for your attention to this request and look forward to your response within 15 working days. If you have any questions, please contact staff members Dr. Kristen Kulinowski or Mr. Jeff Duncan at (202)225-2836.

Sincerely,



Edward J. Markey  
Member of Congress